

Appl. No. : 09/581,651
Filed : October 10, 2000

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A recombinant polynucleotide encoding a polypeptide comprising the amino acid sequence (~~SEQ ID NO: 1~~): VSIPPRNLGY (~~SEQ ID NO: 41~~)

~~NLVATCLFVR ASLPHRLNML RGPGLLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP
VAVSQSKPGC YDNCKHYQIN QWERTYLCN VLVCTCYGGS RGFNCESKPE ABETCFDKYT
GNTYRVGDTY ERPKDSMIWD CTCIGAGRCR ISCTIANRCH EGGQSYKICD TWRRPHETGG
YMLEGVCLGN CKGEWTCCKPI AEKCFDHAAG TSYVVGETWE KPYQCWMMVD CTCLGEGSGR
ITCTSRNRCN DQDTRTSYRI GDTWSKKDNR CNLLQCICFC NCRGEWKCEH HTSVQTTSSG
SGPFTDVRAA VYQPPHPQP PPYGHCVTDS GVVYGVGMQW LKTQCNKQML CTCLGNGVSC
QETAVTQTYG CNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYGFCT
DHTVLVQTQC CNSNGALCHF PFLYNNHNYT DCTSEGRRDN MKWCCTTQNY DADQKFGFCF
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD
ITYNVNDTFH KRHEEGHMLN CTCFCGQRCR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG
VRYQCYCYGR CIGEWHCQPL QTYPSSSCPV EVFITETPSQ PMSHPIQWNA PQPSHISKYI
LRWRPVSIIP RNLCY~~

~~or variants thereof having an insertion, deletion, or substitution and having migration stimulation factor activity;~~

~~or fragments thereof which has migration stimulation factor activity;~~

~~or derivatives or fusions a fusion thereof which has migration stimulation factor activity;~~

~~or fusions of said variants or fragments or derivatives~~

wherein the polynucleotide has at least one characteristic selected from the group consisting of:

wherein (a) the polypeptide it encodes has migration stimulation factor activity; and wherein migration stimulation factor activity refers to stimulation of adult skin fibroblast migration;

(b) the polypeptide it encodes elicits antibodies that recognize migration stimulation factor, but does not recognize fibronectin; and

(c) polynucleotide can hybridize to a gene that encodes migration stimulation factor.

2. (Currently amended) A recombinant polynucleotide according to Claim 1, encoding a polypeptide comprising the amino acid sequence shown in Figure 2 labeled pMSF1 α between positions 19 and 660 (~~SEQ ID NO: 36~~ SEQ ID NO: 2), ~~or variants or fragments or derivatives or fusions thereof or fusions of said variants or fragments or derivatives.~~

Appl. No. : 09/581,651
Filed : October 10, 2000

3. (Previously presented) A polynucleotide according to Claim 1, which contains no introns.

4. (Currently amended) A polynucleotide according to Claim 1, comprising the polynucleotide whose sequence is shown in Figure 1 (SEQ ID NO: 2 ~~SEQ ID NO: 3~~).

5. (Currently amended) A polynucleotide according to Claim 1, comprising the polynucleotide whose sequence is shown in Figure 1 between positions 57 and 1982 (SEQ ID NO: 41 ~~SEQ ID NO: 4~~).

6. (Cancelled)

7. (Previously presented) A replicable vector comprising a polynucleotide as defined in Claim 1.

8. (Currently amended) A An isolated host cell comprising a recombinant polynucleotide as defined in Claim 1 or a replicable vector comprising the polynucleotide.

9. (Currently amended) A method of making a polypeptide having the amino acid sequence (~~SEQ ID NO: 1~~): VSIPPRNLGY (SEQ ID NO: 41)

~~NLVATCLPVR ASLPHRLNML RGPCLLLLL AVLCLGTAVP STGASKSKRQ AQQMVQPQSP
VAVSQSKPCC YDNGKHQIN QWERTYLCN VLVCTCYGGS RCFNCEKPE AEETCFDKYT
GNTYRVGDTY ERPKDSMIWD CTCICAGRGR ISCTIANRCH EGCQSYKIGD TWRRPHETGG
YMLECVCLCN GKCEWTCKPI AEKCFDHAAG TSYVVGATWE KPYQGWMMVD CTCLGEGSGR
ITCTSRNREN DQDTRTSYRI GDTWSKKDNR GNLLQCICTG NCRGEWKCEER HTSVQTTSSG
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVYVGVGMQW LKTQGNKQML CTCLGNCVSC
QETAVTQTYG CNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT
DHTVLVQTQC CNSNGALCHF PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNG RGEWTCYAYS QLRDQCIVDD
ITYNVDTFH KRHEEGHMLN CTCFCQCRGR WKCDPVDCQ DSETGTFYQI GDSWEKYVHG
VRYQCYCYGR CIGEWHCQPL QTYPSSSCP EVFITETPSQ PSHPIQWNA PQPSHISKYI
LRWRPVSIIP RNLCY~~

~~or variants or fragments or fusions or derivatives thereof, or fusions of said variants or fragments or derivatives, the method comprising culturing a host cell as defined in Claim 8 which expresses said variant or fragment or derivative or fusion and isolating said polypeptide or variant or fragment or derivative or fusion from said host cell culture.~~

10. (Currently amended) A polypeptide encoded by a polynucleotide having SEQ ID NO: 4 comprising the amino acids sequence (SEQ ID NO: 4)

~~NLVATCLPVR ASLPHRLNML RGPCLLLLL AVLCLGTAVP STGASKSKRQ AWWWVQPQSP
VAVSQSKPCC YDNGKHQIN QWERTYLCN VLVCTCYGGS RCFNCEKPE AEETCFDKYT
GNTYRVGDTY ERPKDSMIWD CTCICAGRGR ISCTIANRCH EGCQSYKIGD TWRRPHETGG
YMLECVCLCN GKCEWTCKPI AEKCFDHAAG TSYVVGATWE KPYQGWMMVD CTCLGEGSGR
ITCTSRNREN DQDTRTSYRI GDTWSKKDNR GNLLQCICTG NCRGEWKCEER HTSVQTTSSG
SGPFTDVRAA VYQPQPHQP PPYGHCVTDS GVYVGVGMQW LKTQGNKQML CTCLGNCVSC~~

Appl. No. : 09/581,651
Filed : October 10, 2000

~~QETAVTQTYG CNSNGEPCVL PFTYNGRTFY SCTTEGRQDG HLWCSTTSNY EQDQKYSFCT
DHTVLVQTQC CNSNGALCHF PFLYNNHNYT DCTSEGRRDN MKWCGTTQNY DADQKFGFCP
MAAHEEICTT NEGVMYRIGD QWDKQHDMDH MMRCTCVGNC RGEWTCYAYS QLRDQCI VDD
ITYNVNDTFH KRHEEGHMLN CTCFCQGRGR WKCDPVDQCQ DSETGTFYQI GDSWEKYVHG
VRYQCYCYGR GIGEWHCQPL QTYPSSSGPV EVFITETPSQ PNSHPIQWNA PQPSHISKYI
LRWRPVSI PP RN LGY~~

~~or variants or fragments or fusions or derivatives thereof or fusions of said variants or fragments or derivatives.~~

11. (Currently amended) A polypeptide according to Claim 10, comprising a polypeptide encoded by the polynucleotide having SEQ ID NO: ~~3~~ the amino acid sequence shown in Figure 2 labeled pMSF1 α between positions 19 and 660 (SEQ ID NO: 36), or variants or fragments or fusions thereof or fusions of said variants or fragments.

Claims 12-28 (Cancelled)

29. (Currently amended) A molecule according to Claim 27 which is a peptide consisting of ~~comprising any one of the sequences~~ a sequence selected from the group consisting of ISKYILRWRPVSI PP RN LGY (SEQ ID NO: ~~3~~ SEQ ID NO: 5), or QQWERTYLGNALVCTCYGGSR (SEQ ID NO: ~~4~~ SEQ ID NO: 6), or PCVLPFTYNDRTDSTTSNYEQDQ (SEQ ID NO: ~~5~~ SEQ ID NO: 7), or TDHTVLVQTRGGNSNGALCH (SEQ ID NO: ~~35~~ SEQ ID NO: 8), and or VGNGRGEWTCIAYSQLRDQCI (SEQ ID NO: ~~7~~ SEQ ID NO: 9) which are found in MSF.

Claims 30-35 (Cancelled)

36. (Currently amended) A method of diagnosing cancer, in a person the method comprising detecting in a sample from the person to be diagnosed the presence of a polypeptide according to Claim 10 using a reagent that can distinguish said polypeptide from fibronectin (SEQ ID NO: ~~44~~ SEQ ID NO: 17).

37. (Currently amended) A method of determining susceptibility to cancer the method comprising detecting in a sample derived from the person to be tested the presence of a polypeptide according to Claim 10 using a reagent that can distinguish said polypeptide from fibronectin (SEQ ID NO: ~~44~~ SEQ ID NO: 17).

38. (Currently amended) A method of determining the likely outcome of a patient with cancer the method comprising detecting in a sample from the patient the

Appl. No. : 09/581,651
Filed : October 10, 2000

presence of polypeptide according to Claim 10 using a reagent that can distinguish said polypeptide from fibronectin (~~SEQ ID NO: 44~~ SEQ ID NO: 17).

39. (Previously presented) A method according to any one of Claims 36 to 37, wherein the reagent which can distinguish said polypeptide from fibronectin is an antibody.

40. (Currently amended) A method of diagnosing cancer the method comprising detecting in a sample from the person to be diagnosed a polynucleotide ~~encoding a polypeptide according to Claim 10~~ according to Claim 1 using a reagent that can distinguish said polynucleotide from a polynucleotide encoding fibronectin (~~SEQ ID NO: 44~~ SEQ ID NO: 17).

41. (Currently amended) A method of determining susceptibility to cancer the method comprising detecting in a sample derived from the person to be tested the presence of a polynucleotide according to Claim ~~10~~ 1 using a reagent that can distinguish said polynucleotide from a polynucleotide encoding fibronectin (~~SEQ ID NO: 44~~ SEQ ID NO: 17).

42. (Currently amended) A method of determining the likely outcome of a patient with cancer the method comprising detecting in a sample from a patient the presence of a polynucleotide ~~encoding a polypeptide according to Claim 10~~ according to Claim 1 using a reagent that said polynucleotide from a polynucleotide encoding fibronectin (~~SEQ ID NO: 44~~ SEQ ID NO: 17).

43. (Cancelled)

44. (Previously presented) A method according to any one of Claims 36 to 38 and 40 to 42, wherein the cancer is breast cancer.

45. (Cancelled)

46. (Cancelled)

47. (Currently amended) A method of modulating cell migration the method comprising administering an effective amount of a polypeptide according to ~~any one of Claims Claim-10 and 12~~ Claim 10 to the site where modulation of cell migration is required.

Appl. No. : 09/581,651
Filed : October 10, 2000

48. (Previously presented) A method according to Claim 47, wherein the cell is a fibroblast or an endothelial cell.

49. (Previously presented) A method according to Claim 47, wherein the site is in a mammalian body.

50. (Previously presented) A method according to Claim 49, wherein the site is in a human body.

51. (Currently amended) A method for modulating cell migration at a site within a mammalian body comprising administering a polypeptide according to ~~any one of Claims~~ Claim 10 and 12 to the site.

52. (Cancelled)

53. (Currently amended) A method of healing a wound the method comprising administering to the locality of the wound an effective amount of a polypeptide according to ~~any one of Claims~~ Claim 10 and 12.

54. (Cancelled)

55. (Cancelled)

56. (Currently amended) A pharmaceutical composition comprising a polypeptide according to ~~any one of Claims 10 and 12~~ and a pharmaceutically acceptable carrier.

57. (Cancelled)

58. (Currently amended) A method of preventing scarring comprising administering to the locality of the site where scarring is to be prevented an effective amount of polypeptide according to ~~any one of Claims~~ Claim 10 and 12.

59. (Cancelled)